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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/802,342	03/17/2004	Peter M.J. Bedding	7593-CIP	3643

22922 7590 07/15/2009
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EXAMINER

GHALI, ISIS A D

ART UNIT	PAPER NUMBER
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1611

NOTIFICATION DATE	DELIVERY MODE
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07/15/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

IPAdmin@reinhartlaw.com

Office Action Summary	Application No. 10/802,342	Applicant(s) BEDDING ET AL.	
	Examiner Isis A. Ghali	Art Unit 1611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 and 24-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 and 24-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The finality of the previous office action mailed 11/05/2008 has been withdrawn.

Claims 1-60 were pending.

Claims 23 and 39-60 have been canceled.

Claims 1-22, 24-38 are pending and included in the prosecution.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 4, 7, 11-17, 29-30, and 38 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 01/74173 ('173).

WO '173 disclosed equine feedstuff comprising fiber source including oats; oil including corn oil, soya oil, palm oil, and sunflower oil; protein hydrolysate that provides glutamine (abstract; page 3, lines 14-28; page 4, lines 21-22). The amount of fibers in the composition forms 2-20%, and oils forms 2-20% (page 4, lines 3-6; table in page 5).

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The feed further comprises vitamins and minerals (both reads on medication claimed by claim 38). The oils disclosed by the reference are inherently polar lipid supplements that are high in galactolipids and antioxidants. Glutamine reads on nutricine.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

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consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1, 2, 4, 7, 11-17, 29-30, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 01/74173 ('173) in view of the article "Effect of varying content of soluble dietary fibre from wheat flour and oat milling fractions on gastric emptying in pigs" by Johansen et al.

WO '173 teaches supplemental dietary feedstuff comprising fiber source including oats that contain beta glucan soluble fibers; oil including corn oil, soya oil, palm oil, and sunflower oil, i.e. polar lipids; amino acid L-glutamine, which is nutritive claimed by applicants (abstract; page 3, lines 14-28; page 4, lines 21-22). The amount of fibers in the composition forms 2-20%, and oils forms 2-20% (page 4, lines 3-23; table in page 5). The feed further comprises vitamins and minerals (both reads on medication claimed by claim 22).

Although WO '173 teaches oat in the supplemental dietary foodstuff, and oat contains β -glucan soluble fibers, however, the reference does not explicitly teach that the dietary food supplement comprises soluble fibers per se that slow the passage of ingested food stuff through the stomach as claimed by claim 1.

Johansen teaches that feeding a diet with higher contents of β -glucan soluble fibers results in a general trend towards slower emptying of the stomach and delays absorption of glucose resulting in attenuated post-prandial peripheral glucose and

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insulin responses to carbohydrate meals in man and animals (page 339, last paragraph; page 350, conclusion).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to provide supplemental dietary foodstuff comprising oat that contains soluble fiber, polar lipids and oils, and glutamine as disclosed by WO '173, and use β -glucan oat soluble fibers in particular as taught by Johansen. One would have been motivated to do so because Johansen teaches that high contents of β -glucan soluble fibers results in slowing emptying of the stomach and delay in absorption of glucose resulting in attenuated post-prandial peripheral glucose and insulin responses to carbohydrate meals in man and animals. One would reasonably expected formulating supplement dietary foodstuff comprising oats β -glucan soluble fiber in high, polar lipids and oils, and glutamine wherein the food supplement successfully provides the dietary fiber requirements without raising blood glucose level even with carbohydrate meal.

WO '173 does not specifically disclose the amount of the soluble fibers as claimed by claims 16 and 17. However, those of ordinary skill in the art would have been readily optimized effective dosages as determined by good medical practice and the clinical condition of the individual horse to be fed. Determination of the appropriate dosage for treatment involving each of the above mentioned ingredients would have been routinely made by those of ordinary skill in the art and is within the ability of tasks routinely performed by them without undue experimentation.

7. Claims 3, 5, 6, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO '173 by itself or WO '173 combined with Johansen, each in view of US 6,410,067 ('067).

The teachings of WO '173 by itself or its combination with Johansen are previously discussed as set forth in this office action.

Although WO '173 teaches oils in the feed composition, however, it does not explicitly teach oat oil and amount of oat oil as instantly claimed by claims 3, 5, 8 and 9, or oil is mixture of oat oil from all phases of extraction process as claimed by claim 6.

US '067 teaches nutritional supplement for equine that meets the dietary needs of the neonates, athletics and geriatric horses, wherein the supplement comprises high proportion of fat up to 50% (abstract; col.2, lines 5-16; col.3, lines 10-12). The fat comprises oat oil (col.2, lines 5-25).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to provide equine foodstuff comprising oat as source of fiber, oil, protein hydrolysate and nutrice as taught by WO '173, or as taught by WO '173 combined with Johansen, and replace oil with high proportion of oat oil or further add high proportion of oat oil to the feed composition as taught by US '067. One would have been motivated to do so because US '067 teaches that supplements containing high proportion of oat oil meets the dietary needs of the neonates, athletics and geriatric horses. One would reasonably expected formulating equine feed comprising oats fiber, high proportion of oat oil, hydrolysate protein, and nutrice wherein the feed successfully provides the needs for neonates, athletics and geriatric horses.

Regarding claim 6, the limitation of using mixture of oat oil from all phases of extraction process does not impart patentability to the claims in absence of superior and unexpected results.

8. Claims 10, 27, 28, 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over the teaching of WO '173, or the combined teaching of WO '173 and Johansen, and further in view of US 2002/0044988 ('988).

The teachings of WO '173 and its combination with Johansen are previously discussed as set forth in this office action.

Although WO '173 teaches fibers, hydrolyzed protein, and vitamins in animal feed composition, however, reference does not explicitly teach oligosaccharide fibers as claimed by claim 10, hydrolyzed protein from whey as claimed by claims 27 and 28, or vitamin E and its amount as claimed by claims 33 and 34.

US '988 teaches composition suitable for administration to animals to stimulate body protein synthesis and to improve body muscle mass and recovery (abstract; paragraph 0030). The composition comprising whey protein hydrolysate, vitamin E, oligosaccharide fibers and oil source (paragraphs: 0016, 0019, 0023, 0026, 0028, 0044, 0048, and 0051). Whey protein hydrolysate is expected to be rich in immunoglobulins and lactalbumins since compounds and their properties are inseparable.

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to provide equine foodstuff comprising oat as source of fiber, oil, protein hydrolysate, nutrice and vitamins as taught by WO '173, or WO '173

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combined with Johansen, and replace the oat fibers with oligosaccharide fibers and the protein hydrolysate with whey protein hydrolysate, and vitamin with vitamin E as taught by US '988. One would have been motivated to do so because US '988 teaches that composition comprising such ingredients stimulates body protein synthesis and improves body muscle mass and recovery. One would reasonably expected formulating equine feed comprising oligosaccharide fibers, oil, whey protein hydrolysate, nutriceine, and vitamin E wherein the feed successfully stimulates body protein synthesis and improves body muscle mass and recovery.

Regarding the amount of vitamin E as claimed by claim 34, the amount does not impart patentability to the claims in absence of superior and unexpected results.

9. Claims 31 and 32 rejected under 35 U.S.C. 103(a) as being unpatentable over WO '173 by itself, or combined with Johansen.

The teachings of WO '173 and its combination with Johansen are previously discussed as set forth in this office action.

However, the reference does not explicitly teach the concentration of glutamine in the feed as claimed by claims 31 and 32.

However, those of ordinary skill in the art would have been readily optimized effective dosages as determined by good medical practice and the clinical condition of the individual horse to be fed. Determination of the appropriate dosage for treatment involving vitamin E would have been routinely made by those of ordinary skill in the art

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and is within the ability of tasks routinely performed by them without undue experimentation.

10. Claims 18-22, 24-26, 35, 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over the teaching of WO '173 by itself or WO '173 combined with Johansen, further in view of the teaching of Alltech.

The teachings of WO '173 and WO '173 combined with Johansen are previously discussed as set forth in this office action.

Although WO '173 teaches nutricine and protein in animal feed, however, it does not explicitly teach nucleotide from yeast as claimed by claims 18-22 and 24-26. WO '173 teaches mineral, however, does not explicitly teach organic selenium as claimed by claims 35 and 37.

Alltech teaches enhancement of animal physiological condition through nutrition including Yea-Sacc®1026 as yeast culture as a performance enhancing for animals. Yea-Sate1026 is an active yeast culture comprised of viable cells from the strain *Saccharomyces cerevisiae* 1026. Yea-Sacc1026 is the only yeast culture that can be called rumen modifier. Alltech disclosed Bio-Mos that is a phosphorylated mannanoligosaccharide derived from the cell wall of the yeast and has been scientifically proven around the world to be beneficial to animals. Bio-Mos has shown positive results alone and in combination with antibiotic programs in animal diets. Alltech teaches that organic selenium is crucial mineral as protective in a number of

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metabolic diseases and essential for the basic functions of growth and reproduction and improves animal performance.

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to provide equine foodstuff comprising oat fiber source, oil, protein hydrolysate, nutriceine, and minerals as taught by WO '173 or WO '173 combined with Johansen, and further add Bio-Mos which is yeast cell wall. One would have been motivated to do so because Bio Mos is taught by Alltech as scientifically proven around the world to be beneficial to animals and has shown positive results alone and in combination with antibiotic programs in animal diets. One would reasonably expected formulating horse feed comprises oats as fiber source, oil, protein hydrolysate that provides glutamine, and minerals and Bio-Mos that provides advantage to the animal digestive system and benefit the animal health in general.

Additionally, one having ordinary skill in the art would have been motivated to replace the mineral taught by WO '173 with organic selenium taught by Alltech. One would have been motivated to do so because Alltech teaches that organic selenium is crucial mineral as it is protective in a number of metabolic diseases and essential for the basic functions of growth and reproduction and improves animal performance. One would reasonably expected formulating animal feed comprises oats as fiber source, oil, protein hydrolysate, glutamine, Bio-Mos and selenium that provides advantage to gastrointestinal tract and protect animal against metabolic diseases.

The available Alltech information, does not disclose the amount of Bio-Mos or organic selenium in the feed. However, those of ordinary skill in the art would have been

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readily optimized effective dosages as determined by good medical practice and the clinical condition of the individual horse to be fed. Determination of the appropriate dosage for treatment involving each of the above mentioned ingredients would have been routinely made by those of ordinary skill in the art and is within the ability of tasks routinely performed by them without undue experimentation. One would have been motivated to combine these references and make the modification because they are drawn to same technical fields (constituted with same ingredients and share common utilities), and pertinent to the problem which applicant concerns about. MPEP 2141.01(a).

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isis A. Ghali whose telephone number is (571) 272-0595. The examiner can normally be reached on Monday-Thursday, 6:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sharmila Landau can be reached on (571) 272-0614. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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IG

/Isis A Ghali/
Primary Examiner, Art Unit 1611